REMARKS/ARGUMENTS

Applicants appreciate the Examiner's continued thorough search and examination of the present patent application.

Applicants further note with appreciation the withdrawal of the objection to claim 20 in view of applicants' previously filed Amendment.

Claims 16-21 stand rejected under 35 U.S.C. §112. Applicants respectfully traverse this rejection.

The Examiner states that the disclosure "does not appear to provide for selecting between or from two different types of wavelet transform techniques." Accordingly, the claim language is interpreted as "from a lifting scheme or a correction method" in order to be consistent with the original specification. Applicants respectfully submit that claims 16-21 include the feature of a wavelet transform derived using a technique "selected from a lifting scheme and a correction method." Thus, applicants respectfully submit that, as the Examiner has correctly interpreted, the claims define that the wavelet transform is derived using either a lifting scheme or a correction method. Therefore, applicants respectfully submit that the rejection under 35 U.S.C. §112, first paragraph, is unwarranted. Reconsideration is respectfully requested.

Claim 16 stands rejected under 35 U.S.C. §102(b) as being anticipated by Lawton (U.S. Patent No. 4,974,187). Applicants respectfully traverse this rejection.

Applicants' claim 16 is directed to an image compression system that comprises "an image source providing an image" and a "compressor coupled to the image source[.]" The image has a plurality of pixels, each of the pixels having "a finite number of bits[.]" The compressor is configured to "generate a compressed image based on an integer wavelet transform[.]" Further, the integer wavelet transform uses "modular arithmetic[.]" Wavelet coefficients of the integer wavelet transform have "a finite number of bits that are no greater in number than the highest count for the number of bits for any of the pixels of the image."

Lawton does not include any of these features. The Office Action states that Lawton uses "modular digital signal processing" and an integer waveform transform inherently has a definite number of bits that are no greater in number than the highest count for the number of bits for any

pixels of an image. The Examiner likens Lawton's modular system to using modular arithmetic. Applicants respectfully disagree.

Lawton does not teach or suggest the "modular arithmetic" element of applicants' claim 16. Instead, Lawton uses a modular digital signal processing system, that does not apply modular arithmetic as defined by applicants' claim 16. Lawton describes a digital signal processor system that comprises distinct modules, each of which perform specific operations (including "to perform specific operations, including wavelet transforms, on input sequences and arrays of numerical data") (see, for example, column 2, lines 29-45). Applicants respectfully submit that the modular elements used in Lawton refer to specific design components that is "a modular design" (column 2, line 40) as opposed to applicants' claim 16 "modular arithmetic," which deals with whole numbers where the numbers are replaced by the remainders after division by a fixed number.

Further, Lawton does not teach or suggest applicants' claim 1 feature of defining "a compressed image [that is generated and] based on an integer wavelet transform" having "wavelet coefficients of the integer wavelet transform have a finite number of bits that are no greater in number than the highest count for the number of bits for any of the pixels of the image." Instead, Lawton teaches analyzing an input sequence of digital data by a prior art wavelet transform process, a data compression technique well-known in the prior art, and that occurs after an input sequence of digital data has been wavelet transformed. Thus, Lawton does not define any relationship between the number of bits in any of the pixels in an image, and the number of bits in an integer wavelet transform. Thus, Lawton does not teach or suggest "a wavelet transform having a finite number of bits that are no greater in number than the highest count for the number of bits for any of the pixels in the image."

Therefore, applicants respectfully submit that Lawton does not teach or suggest applicants' claim 16 and, therefore, claim 16 is allowable over Lawton.

Independent claims 16, 20 and 21 all recite the features that each wavelet coefficient has a "finite number of bits that are no greater in detail than the number of bits for any of the pixels", and that the coefficients are produced using "modular arithmetic." Claims 17-19 depend directly

from claim 16, and are, therefore, patentable for the same reasons, and because they include features which in combination with the claim from which they depend are not taught, suggested or disclosed in the prior art.

Claims 17-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lawton in view of Chui (U.S. Patent No. 5,604,824). Applicants respectfully traverse this rejection.

Chui is cited by the Examiner for teaching quantizing a wavelet transformed image to produce a compressed image, entropy encoding a quantized image to produce a compressed image, and performing color transformation to produce a compressed image. The Examiner relies on Chui for teaching these elements in his rejection of claims 17-21. Applicants respectfully traverses this rejection.

Chui does not teach or suggest the elements of applicants' claim 16 that are missing from the teachings of Lawton. More particularly, Chui does not teach or suggest a "compressor" (or decompressor) configured to generate a "compressed" (or decompressed, respectively) image "based on an integer wavelet transform," wherein the integer wavelet transform used "modular arithmetic and wavelet coefficients of the integer wavelet transform have a finite number of bits that are no greater in number than a finite number of bits for any of the pixels" of a (decompressed, respectively) image. Thus, applicants respectfully submit that Chui does not supply the elements of applicants' claim 16 that are missing from the teachings of Lawton and, therefore, the combination of Chui and Lawton does not teach or suggest applicants' claims 17-21. Accordingly, applicants respectfully request that the rejection of claims 17-21 under 35 U.S.C. §103(a) over Lawton and Chui be reconsidered and withdrawn.

Applicants respectfully believe that the foregoing is a complete and accurate response to all issues raised in the most recent Office Action. In view of the above discussion, applicants respectfully believe that the present application is now in condition for allowance, and earnestly

solicits notice to that effect.
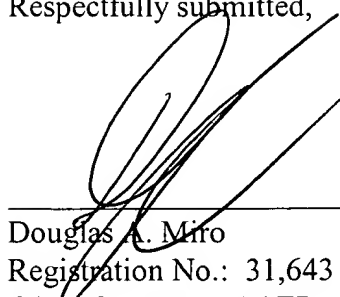
Respectfully submitted,

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